Physica C 194 (1992) 449–452
North-Holland

PHYSICA C

Author Index to Volume 194

Aligia, A.A. and J. Garcés, Thermodynamics of O ordering in $YBa_2Cu_3O_{6+x}$. Effect of Coulomb repulsion **194**, 223
Allgeier, C., J.J. Neumeier and J.S. Schilling, Strong influence of the oxygen content on the electrical and magnetic properties of $Bi_2Sr_{1.6}La_{0.4}CuO_y$ **194**, 337
Andoh, H., M. Inoue, Y. Takai and H. Hayakawa, Superconducting stratified structure studies of $YBa_2Cu_3O_x$–BaF_2 composites **194**, 145
Andrikidis, C., see S.W. Filipczuk **194**, 9
Antson, O., see V.A. Trounov **194**, 415
Arendt, R.H., M.F. Garbauskas, K.W. Lay and J.E. Tkaczyk, The fabrication of high critical current capability bismuth superconductor tape **194**, 383
Arendt, R.H., M.F. Garbauskas, E.L. Hall, K.W. Lay and J.E. Tkaczyk, The role of Ag in the preparation of metal sheathed $(Bi,Pb)_2Ca_2Sr_2Cu_3O_z$ tapes **194**, 393
Arendt, R.H., M.F. Garbauskas, C.A. Meyer, F.J. Rotella, J.D. Jorgensen and R.L. Hitterman, Thermal expansion measurements using neutron diffraction of $(Bi,Pb)_2Ca_2Sr_2Cu_3O_x$ **194**, 397
Asano, H., see M. Sato **194**, 363

Baranova, G.K. and L.A. Dorosinskii, Chemical polishing and etching of Bi–Sr–Ca–Cu–O high–temperature superconducting system **194**, 425
Barbut, J.M., see D. Bourgault **194**, 171
Bazhenov, A.V. and K.B. Rezchikov, Isotope effect and 70 meV feature in $YBa_2Cu_3O_{7-x}$ single crystals **194**, 411
Bodák, V., see D. Macko **194**, 59
Boguslavskij, Yu.M., J. Gao, A.J.H.M. Rijnders, D. Terpstra, G.J. Gerritsma and H. Rogalla, Transport processes in $YBa_2Cu_3O_x/PrBa_2Cu_3O_x/YBa_2Cu_3O_x$ ramp type Josephson junctions **194**, 268
Bourdillon, A.J. and N.X. Tan, Ionic energy levels and hole formation in high temperature superconductors **194**, 327
Bourgault, D., P. de Rango, J.M. Barbut, D. Braithwaite, M.R. Lees, P. Lejay, A. Sulpice and R. Tournier, Magnetically melt textured $YBa_2Cu_3O_{7-\delta}$. Disagreement between J_c determined by magnetic and direct transport measurements **194**, 171
Braithwaite, D., see D. Bourgault **194**, 171
Brinkmann, D., see I. Mangelschots **194**, 277
Buckley, R.G., see J.L. Tallon **194**, 150
Burlachkov, L., see M. Konczykowski **194**, 155
Bush, A.A., see V.I. Muromtsev **194**, 71
Buzdin, A.I., V.P. Damjanović and A.Yu. Simonov, Superconducting properties of atomic S/N and S/S′ superstructures **194**, 109

Carim, A.H., see M.J. Mayo **194**, 435
Chan, W.C., see Y.Y. Xue **194**, 194
Chandrachood, M.R., P.K. Narwankar, D.E. Morris and A.P.B. Sinha, Phase equilibria in Y–Sr–Cu–O pseudoternary system at elevated oxygen pressure of 200 bar **194**, 205
Chang, B.P., see W. Eidelloth **194**, 92
Chernykh, A.V., S.N. Ermolov, V.A. Marchenko, A.V. Nikulov and A.G. Znamenskii, On the mechanism responsible for the value of critical current in *c*-axis-oriented $YBa_2Cu_3O_{7-x}$ films **194**, 105
Christen, D.K., see Y.R. Sun **194**, 403
Chu, C.W., see Y.Y. Xue **194**, 194

Damjanović, V.P., see A.I. Buzdin **194**, 109
Dart, D.L., see S.W. Filipczuk **194**, 9
Datars, W.R., see R.K. Nkum **194**, 321
De Rango, P., see D. Bourgault **194**, 171
Diko, P., see D. Macko **194**, 59
Dorosinskii, L.A., see G.K. Baranova **194**, 425
Dou, S.X., Y.C. Guo and H.K. Liu, Magnetic properties and microstructures in Ag-clad Bi–Pb–Sr–Ca–Cu–O wires **194**, 343
Duka, A.Ya., see B.Ya. Sukharevskii **194**, 373

Eidelloth, W., A. Levy, B.P. Chang and W.J. Gallagher, $SrTiO_3$/$YBa_2Cu_3O_{7-\delta}$ bilayers. Fabrication and characterization **194**, 92
Emel'chenko, G.A., see N.A. Tulina **194**, 370
Ermolov, S.N., see A.V. Chernykh **194**, 105

Fang, H.H., see Y.Y. Xue **194**, 194
Feinberg, D., Theory of the tilted vortex lattice in Josephson-coupled layered superconductors **194**, 126
Feng, S., R. Guo and F. Han, Superconductivity in the background of disordered flux state of spins **194**, 187
Filipczuk, S.W., C. Andrikidis and D.L. Dart, Aspects of low temperature annealing. $YBa_2Cu_3O_{7-\delta}$ thin films **194**, 9
Fischer, P., see V.A. Trounov **194**, 415
Fueki, K., see Y. Idemoto **194**, 177
Fukazawa, T., see U. Kabasawa **194**, 261

Gallagher, W.J., see W. Eidelloth **194**, 92
Gao, J., see Yu.M. Boguslavskij **194**, 268
Garbauskas, M.F., see R.H. Arendt **194**, 383
Garbauskas, M.F., see R.H. Arendt **194**, 393
Garbauskas, M.F., see R.H. Arendt **194**, 397
Garcés, J., see A.A. Aligia **194**, 223
Gerritsma, G.J., see Yu.M. Boguslavskij **194**, 268
Ghivelder, L., P. Rodrigues Jr., P. Pureur, J.H. Souza and

S. Reich, Specific heat of superconducting YBaCuO–Ag nonrandom composite **194**, 97
Gilberd, P.W., see J.L. Tallon **194**, 150
Glowacki, B.A., see N. Özkan **194**, 157
Güntherodt, H.-J., see H.P. Lang **194**, 81
Guo, R., see S. Feng **194**, 187
Guo, Y.C., see S.X. Dou **194**, 343

Haefke, H., see H.P. Lang **194**, 81
Haga, T., see N. Homma **194**, 430
Hall, E.L., see R.H. Arendt **194**, 393
Hammetter, W.F., see M.J. Mayo **194**, 435
Han, F., see S. Feng **194**, 187
Hase, T., R. Kita, T. Koga and T. Morishita, Synthesis of Y–Ba–Cu–O thin films from metallic Y–Ba–Cu precursor followed by a low temperature annealing **194**, 55
Hayakawa, H., see H. Andoh **194**, 145
Hervieu, M., see A.Q. Pham **194**, 243
Hewat, A.W., see V.A. Trounov **194**, 415
Hiratani, M., see U. Kabasawa **194**, 261
Hirsch, J.E., Effect of local potential variations in the model of hole superconductivity **194**, 119
Hitterman, R.L., see R.H. Arendt **194**, 397
Hohlwein, D., see T. Zeiske **194**, 1
Holtzberg, F., see M. Konczykowski **194**, 155
Holtzberg, F., see Y.R. Sun **194**, 403
Homma, N., S. Okayama, H. Takahashi, S. Kawamoto, I. Yoshida, M. Kamei, T. Morishita, T. Haga and K. Yamaya, Crystallinity of *a*-axis oriented $YBa_2Cu_3O_{7-\delta}$ thin films epitaxially grown on $NdGaO_3$ (110) and $SrTiO_3$ (100) **194**, 430
Hoonsawat, R. and M. Siribangphae, Exact calculations of the current–voltage curves for N–I–S and S′–I–S junctions with comparison to experimental data **194**, 31
Hor, P.H., see Y.Y. Xue **194**, 194
Huang, Z.J., see Y.Y. Xue **194**, 194

Idemoto, Y., J. Takahashi and K. Fueki, Standard enthalpies of formation of member oxides in the Y–Ba–Cu–O system **194**, 177
Inoue, M., see H. Andoh **194**, 145
Ivlev, B.I., see Yu.N. Ovchinnikov **194**, 153

Jaggi, N.K., see S.F. Wahid **194**, 211
Jeffries, C.D., see Q.H. Lam **194**, 37
Jeffries, C.D., see Q.H. Lam **194**, 47
Jo, W., see G.-C. Yi **194**, 293
Jorgensen, J.D., see R.H. Arendt **194**, 397

Kabasawa, U., Y. Tarutani, A. Tsukamoto, T. Fukazawa, M. Hiratani and K. Takagi, Electrical characteristics of $HoBa_2Cu_3O_{7-x}$–$PrBa_2Cu_3O_{7-y}$–$HoBa_2Cu_3O_{7-x}$ junctions with planar-type structures **194**, 261
Kabius, B., see X.F. Zhang **194**, 253
Kaganovich, T.Yu., see V.A. Trounov **194**, 415
Kaldis, E., see I. Mangelschots **194**, 277
Kamei, M., see N. Homma **194**, 430
Kaneko, T., see S. Tajima **194**, 301
Karpinski, J., see I. Mangelschots **194**, 277
Kašpárková, M., see D. Macko **194**, 59
Kawamoto, S., see N. Homma **194**, 430
Khim, Z.G., see G.-C. Yi **194**, 293
Khokhlova, S.I., see B.Ya. Sukharevskii **194**, 373
Kim, Y.K., see G.-C. Yi **194**, 293
Kita, R., see T. Hase **194**, 55
Ko, D.-K., see G.-C. Yi **194**, 293
Kochorbe, F.G., see M.E. Palistrant **194**, 351
Koga, T., see T. Hase **194**, 55
Kolesnikov, N.N., see N.A. Tulina **194**, 370
Konaka, T., see M. Sato **194**, 363
Konczykowski, M., L. Burlachkov, Y. Yeshurun and F. Holtzberg, Bean–Livingston barriers. A new source for magnetic irreversibility in $YBa_2Cu_3O_7$ crystals **194**, 155
Koshizuka, N., see S. Tajima **194**, 301
Kosuge, M., see S. Tajima **194**, 301
Koyama, T., N. Takezawa, Y. Naruse and M. Tachiki, New continuous model for intrinsic layered superconductors **194**, 20
Krishnan, H., V. Sankaranarayanan and R. Srinivasan, Excess conductivity studies in the paracoherence region in high temperature superconductors **194**, 163
Krykin, M.A., see V.I. Muromtsev **194**, 71
Kubanek, F., see T. Zeiske **194**, 1
Kulakov, M.P., see N.A. Tulina **194**, 370
Kurbakov, A.I., see V.A. Trounov **194**, 415
Kwei, G.H., K.C. Ott and E.J. Peterson, Neutron powder diffraction study of Cu-site preference of Li dopants in $YBa_2(Cu_{1-x}Li_x)_3O_{6+\delta}$ **194**, 307

Labroo, S., see W.J. Yeh **194**, 141
Lam, Q.H. and C.D. Jeffries, Dependence of complex permeability and harmonic power generation of sintered $YBa_2Cu_3O_{7-\delta}$ rod on applied AC and DC magnetic fields **194**, 37
Lam, Q.H. and C.D. Jeffries, Temperature dependence of the inter- and intragranular components of the complex permeability in a sintered $YBa_2Cu_3O_{7-\delta}$ cylinder: two transition temperatures **194**, 47
Lang, H.P., H. Haefke, G. Leemann and H.-J. Güntherodt, Scanning tunneling microscopy study of different growth stages of $YBa_2Cu_3O_{7-\delta}$ thin films **194**, 81
Lay, K.W., see R.H. Arendt **194**, 383
Lay, K.W., see R.H. Arendt **194**, 393
Leemann, G., see H.P. Lang **194**, 81
Lees, M.R., see D. Bourgault **194**, 171
Lejay, P., see D. Bourgault **194**, 171
Levy, A., see W. Eidelloth **194**, 92
Lin, C., G. Lu, Z.-X. Liu and Y.-F. Zhang, Superconductivity and antiferromagnetic ordering in $(Gd,Nd,Ce)_2CuO_4$ **194**, 66
Liu, H.K., see S.X. Dou **194**, 343
Liu, Z.-X., see C. Lin **194**, 66
Lu, G., see C. Lin **194**, 66

Maayouf, R.M.A., see V.A. Trounov **194**, 415
Macko, D., M. Kašpárková, I. Sargánková, P. Diko and V. Bodák, Far-infrared properties of Pr-doped $YBa_2Cu_3O_y$ ceramics **194**, 59
Maignan, A., see A.Q. Pham **194**, 243
Mali, M., see I. Mangelschots **194**, 277
Mangelschots, I., M. Mali, J. Roos, D. Brinkmann, S. Rusiecki, J. Karpinski and E. Kaldis, ^{17}O NMR study in aligned $YBa_2Cu_4O_8$ powder **194**, 277
Marchenko, V.A., see A.V. Chernykh **194**, 105
Marwick, A.D., see Y.R. Sun **194**, 403
Maslennikov, I.O., see V.I. Muromtsev **194**, 71
Matveev, A.V., see V.A. Trounov **194**, 415
Mawdsley, A., see J.L. Tallon **194**, 150
Mayo, M.J., W.F. Hammetter and A.H. Carim, Oxygen desorption and structure in $CaBaLaCu_3O_x$ **194**, 435
Meyer, C.A., see R.H. Arendt **194**, 397
Michel, C., see A.Q. Pham **194**, 243
Mikheenko, P.N., see B.Ya. Sukharevskii **194**, 373
Morishita, T., see T. Hase **194**, 55
Morishita, T., see N. Homma **194**, 430
Morris, D.E., see M.R. Chandrachood **194**, 205
Muromtsev, V.I., V.V. Troitskii, I.O. Maslennikov, M.A. Krykin and A.A. Bush, Memory effect in the microwave absorption of HTSC single crystals in low magnetic field (<0.1 G) **194**, 71

Naruse, Y., see T. Koyama **194**, 20
Narwankar, P.K., see M.R. Chandrachood **194**, 205
Neumeier, J.J., see C. Allgeier **194**, 337
Nikulov, A.V., see A.V. Chernykh **194**, 105
Nkum, R.K., A. Punnett, P.K. Ummat and W.R. Datars, Indium doping in the Bi–Pb–Sr–Ca–Cu–O superconducting system **194**, 321
Noh, H., see G.-C. Yi **194**, 293
Noh, T.W., see G.-C. Yi **194**, 293
Norman, M.R., What is the superconducting order parameter of UPt_3? **194**, 203
Norton, M.L., see Y.Y. Xue **194**, 194

Okayama, S., see N. Homma **194**, 430
Orgaz, E. and E. Ruiz-Trejo, On the superconductivity suppression in $Ln_{1-x}Pr_xBa_2Cu_3O_7$ **194**, 76
Ossandon, J.G., see Y.R. Sun **194**, 403
Ott, K.C., see G.H. Kwei **194**, 307
Ovchinnikov, Yu.N. and B.I. Ivlev, Pinning and creep in high-T_c superconductors **194**, 153
Özkan, N. and B.A. Glowacki, Development of Pb-rich $(Bi,Pb)_3Sr_2Ca_2Cu_1O_x$ phase during reformation of lead doped 2223 superconducting phase from melt quenched glass **194**, 157

Palistrant, M.E. and F.G. Kochorbe, Thermodynamic properties of two-band superconductors with non-phonon superconductivity mechanism **194**, 351
Park, J.Y., see W.J. Yeh **194**, 141
Peterson, E.J., see G.H. Kwei **194**, 307
Pham, A.Q., M. Hervieu, A. Maignan, C. Michel, J. Provost and B. Raveau, Relationships between composition, oxygen non-stoichiometry, structure modulation and superconductivity in the "2212" bismuth cuprates **194**, 243
Pooke, D.M., see J.L. Tallon **194**, 150
Presland, M.R., see J.L. Tallon **194**, 150
Provost, J., see A.Q. Pham **194**, 243
Punnett, A., see R.K. Nkum **194**, 321
Pureur, P., see L. Ghivelder **194**, 97

Raveau, B., see A.Q. Pham **194**, 243
Reich, S., see L. Ghivelder **194**, 97
Rezchikov, K.B., see A.V. Bazhenov **194**, 411
Rijnders, A.J.H.M., see Yu.M. Boguslavskij **194**, 268
Rodrigues Jr., P., see L. Ghivelder **194**, 97
Rogalla, H., see Yu.M. Boguslavskij **194**, 268
Roos, J., see I. Mangelschots **194**, 277
Rotella, F.J., see R.H. Arendt **194**, 397
Ruiz-Trejo, E., see E. Orgaz **194**, 76
Rusiecki, S., see I. Mangelschots **194**, 277

Saemann-Ischenko, G., see X.F. Zhang **194**, 253
Sankaranarayanan, V., see H. Krishnan **194**, 163
Sargánková, I., see D. Macko **194**, 59
Sato, M., T. Konaka and H. Asano, Response of microwave surface impedance in $EuBa_2Cu_3O_{7-x}$ film to a low magnetic field **194**, 363
Schilling, J.S., see C. Allgeier **194**, 337
Schmitt, P., see X.F. Zhang **194**, 253
Schultz, L., see X.F. Zhang **194**, 253
Shatalova, G.E., see B.Ya. Sukharevskii **194**, 373
Sidorov, N.S., see N.A. Tulina **194**, 370
Simonov, A.Yu., see A.I. Buzdin **194**, 109
Sinha, A.P.B., see M.R. Chandrachood **194**, 205
Siribangphae, M., see R. Hoonsawat **194**, 31
Sonntag, R., see T. Zeiske **194**, 1
Souza, J.H., see L. Ghivelder **194**, 97
Sovestnov, A.E., see V.A. Trounov **194**, 415
Srinivasan, R., see H. Krishnan **194**, 163
Sukharevskii, B.Ya., I.V. Zhikharev, S.I. Khokhlova, G.E. Shatalova, A.Ya. Duka, E.O. Tsybulskii and P.N. Mikheenko, Manifestation of the effect of atomic ordering on the characteristics of normal and superconducting states of HTSC-oxides $YBa_2Cu_3O_x$ **194**, 373
Sulpice, A., see D. Bourgault **194**, 171
Sun, Y.R., J.R. Thompson, D.K. Christen, F. Holtzberg, A.D. Marwick and J.G. Ossandon, The temperature- and field-dependent activation energy of a proton irradiated YBCO single crystal **194**, 403

Tachiki, M., see T. Koyama **194**, 20
Tajima, S., S. Uchida, T. Kaneko, I. Tomeno, M. Kosuge, H. Yamauchi and N. Koshizuka, Origin of the 1 eV-reflectivity edges in high-T_c superconducting cuprates **194**, 301

Takagi, K., see U. Kabasawa **194**, 261
Takahashi, H., see N. Homma **194**, 430
Takahashi, J., see Y. Idemoto **194**, 177
Takai, Y., see H. Andoh **194**, 145
Takezawa, N., see T. Koyama **194**, 20
Tallon, J.L., D.M. Pooke, R.G. Buckley, M.R. Presland, A. Mawdsley and P.W. Gilberd, Structural phase diagram for superconducting cuprates. Solid state processing for enhanced flux pinning **194**, 150
Tan, N.X., see A.J. Bourdillon **194**, 327
Tang, H.Y., see Y.Y. Xue **194**, 194
Tarutani, Y., see U. Kabasawa **194**, 261
Terpstra, D., see Yu.M. Boguslavskij **194**, 268
Thompson, J.R., see Y.R. Sun **194**, 403
Tkaczyk, J.E., see R.H. Arendt **194**, 383
Tkaczyk, J.E., see R.H. Arendt **194**, 393
Tomeno, I., see S. Tajima **194**, 301
Tournier, R., see D. Bourgault **194**, 171
Troitskii, V.V., see V.I. Muromtsev **194**, 71
Trounov, V.A., T.Yu. Kaganovich, A.I. Kurbakov, A.V. Matveev, A.E. Sovestnov, A.W. Hewat, P. Fischer, O. Antson and R.M.A. Maayouf, Neutron diffraction study of ^{152}Sm, ^{154}Sm and ^{63}Cu isotope-substituted $SmBa_2Cu_3O_7$ from 1.5 K to 300 K **194**, 415
Tsukamoto, A., see U. Kabasawa **194**, 261
Tsybulskii, E.O., see B.Ya. Sukharevskii **194**, 373
Tulina, N.A., S.V. Zaitsev, G.A. Emel'chenko, M.P. Kulakov, N.N. Kolesnikov and N.S. Sidorov, Investigation of the energy gap and phonon structure in tunneling junctions of the $Bi_2Sr_2CaCu_2O_8$ single crystal cleavages **194**, 370

Uchida, S., see S. Tajima **194**, 301
Ummat, P.K., see R.K. Nkum **194**, 321
Urban, K., see X.F. Zhang **194**, 253

Wahid, S.F. and N.K. Jaggi, Quasistatic nonlinear magnetic response of granular superconductors. Applicability of different models **194**, 211
Wolf, T., see T. Zeiske **194**, 1

Xue, Y.Y., Z.J. Huang, H.H. Fang, W.C. Chan, P.H. Hor, C.W. Chu, M.L. Norton and H.Y. Tang, The irreversibility line and flux creep. A comparative study of $Ba_{1-x}K_xBiO_{3-\delta}$ and $YBa_2Cu_3O_{7-\delta}$ **194**, 194

Yamauchi, H., see S. Tajima **194**, 301
Yamaya, K., see N. Homma **194**, 430
Yeh, W.J., Z.Q. Yu, S. Labroo and J.Y. Park, Power law behavior of the magnetization curves of YBCO materials **194**, 141
Yeshurun, Y., see M. Konczykowski **194**, 155
Yi, G.-C., W. Jo, Y.K. Kim, T.W. Noh, D.-K. Ko, H. Noh and Z.G. Khim, Synthesis and transport properties of $La_{2-x}Sr_xCuO_4$ thin films deposited by laser ablation **194**, 293
Yoshida, I., see N. Homma **194**, 430
Yu, Z.Q., see W.J. Yeh **194**, 141

Zaitsev, S.V., see N.A. Tulina **194**, 370
Zandbergen, H.W., An $a\sqrt{2}$, $a\sqrt{2}$ surface reconstruction of (001) cleaved $GdBa_2Cu_3O_{7-\delta}$ **194**, 287
Zeiske, T., D. Hohlwein, R. Sonntag, F. Kubanek and T. Wolf, Barium displacements in the superconducting ortho-II phase of $YBa_2CU_3O_{6.51}$. An X-ray structure determination **194**, 1
Zhang, X.F., B. Kabius, K. Urban, P. Schmitt, L. Schultz and G. Saemann-Ischenko, Electron microscope investigation of twins in $Bi_2Sr_2CaCu_2O_y$ superconducting thin films on (001) $SrTiO_3$ substrates **194**, 253
Zhang, Y.-F., see C. Lin **194**, 66
Zhikharev, I.V., see B.Ya. Sukharevskii **194**, 373
Znamenskii, A.G., see A.V. Chernykh **194**, 105

Physica C 194 (1992) 453
North-Holland

PHYSICA C

Analytic Subject Index to Volume 194

AC susceptibility 37, 47, 157, 211
Activation energy 403
Anisotropic superconductor 126
Antiferromagnetic order 66, 187
Applications of high-T_c superconductors 92, 145, 343, 383, 393

Band structure 327
–of $YBa_2Cu_4O_8$ 277
BCS model 109

Carrier concentration
–in $Bi_2Sr_{1-6}La_{0.4}CuO_y$ 337
Critical current density 37, 47, 105, 141, 150, 153, 171, 293, 343, 383
Critical stability line 9
Critical state model 141, 211

Defect structures 287

Electrical resistivity 76, 97, 163, 261, 337
–of $YBa_2Cu_3O_x$ 373
Electron-doped superconductor 66
Electronic structure 301, 327, 411
Eliashberg equations 370
Energy gap 109, 119, 351, 370

Far-infrared spectra 411
–of $Y_{1-x}Pr_xBa_2Cu_3O_y$ 59
Fermi surface 351
Fluctuation effects 163
Flux creep 153, 194, 403
Flux lattice 126
Flux pinning 150

Ginzburg–Landau theory 20
Grain alignment (texturing) 171, 430
Granular superconductivity 37, 47, 105, 163, 211

Heavy-fermion superconductors 203
Hole superconductivity 119
HREM 287, 393, 430

Irradiation effect 403
Irreversibility line 155, 194, 343
Isotope effect 411, 415

Josephson effect 126, 268

Laser ablation 293
Lattice parameters
–of $(Bi,Pb)_2Ca_2Sr_2Cu_3O_x$ 397
Layered superconductors 20, 153
Localization 261
Lower critical field H_{c1} 20

Madelung energy 327
Magnetic relaxation 194
Magnetic susceptibility 71, 76, 337
Magnetization 141, 155, 171
Microwave absorption 71, 363
Modulated structures 243
Multilayers 92, 109, 126

Neutron diffraction 307, 415
–on $(Bi,Pb)_2Ca_2Sr_2Cu_3O_x$ 397
NMR
–in $YBa_2Cu_4O_8$ 277

Optical spectroscopy 301
Ortho-II phase 1
O–T transition 223
Oxygen ordering 1, 223, 373
Oxygen stoichiometry 243, 307, 337, 373, 435

Pair breaking 76, 268, 363
Pairing interaction 119
Phase diagram 177, 187, 205, 223
Phonon spectrum 59, 411
Pinning force 37
Proximity effect 31, 261, 268, 370

Scanning tunneling microscopy 81
Specific heat at T_c 97, 351
Specific heat linear coefficient 97
Stratified structure
–of $YBa_2Cu_3O_x$–BaF_2 145
Structural phase transition 150
Structure
–of Bi–Pb–Sr–Ca–Cu–O 321, 343
–of Bi–Sr–Ca–Cu–O 243, 425
–of $CaBaLaCu_3O_x$ 435
–of $GdBa_2Cu_3O_{7-\delta}$ 287
–of $SmBa_2Cu_3O_7$ 415
–of $YBa_2(Cu_{1-x}Li_x)_3O_{6+\delta}$ 307
–of $YBa_2Cu_3O_{6+x}$ 223
– of $YBa_2Cu_3O_{6.51}$ 1
–of $YBa_2Cu_3O_{7-\delta}$ 81
–of $YBa_2Cu_3O_x$ 373
–of Y–Sr–Cu–O 205
Substitution effects 66, 307, 321
–in $Ln_{1-x}Pr_xBa_2Cu_3O_7$ 76
Superconductor–metal composites 97
Surface barrier 155
Synthesis
–of Bi–Sr–Ca–Cu–O 243, 425
–of $CaBaLaCu_3O_x$ 435
–of $YBa_2Cu_3O_{7-\delta}$ 9
–of $YBa_2Cu_3O_{7-x}$ 55
–of Y–Ba–Cu–O 177
–of Y–Sr–Cu–O 205

Thermal analysis 157
Thermal expansion 397
Thin film growth 81
Thin films 92, 105
–of $Bi_2Sr_2CaCu_2O_y$ 253
–of $EuBa_2Cu_3O_{7-x}$ 363
–of $La_{2-x}Sr_xCuO_4$ 293
–of $YBa_2Cu_3O_{7-\delta}$ 9, 430
–of $YBa_2Cu_3O_{7-x}$ 55
T–J model 187
Tunneling 31, 109, 268, 370
Twin boundaries 253
Two-band superconductor 351

Upper critical field H_{c2} 20

Weak links 47, 105, 268, 363

X-ray diffraction 157

Physica C 194 (1992) 455
North-Holland

PHYSICA C

Materials Index to Volume 194

$(Bi,Pb)_2Ca_2Sr_2Cu_3O_x$
–lattice parameters 397
–neutron diffraction 397
$Bi_2Sr_{1-6}La_{0.4}CuO_y$
–carrier concentration 337
$Bi_2Sr_2CaCu_2O_y$
–thin films 253
Bi–Pb–Sr–Ca–Cu–O
–structure 321, 343
Bi–Sr–Ca–Cu–O
–structure 243, 425
–synthesis 243, 425

$CaBaLaCu_3O_x$
–structure 435
–synthesis 435

$EuBa_2Cu_3O_{7-x}$
–thin films 363

$GdBa_2Cu_3O_{7-\delta}$
–structure 287

$La_{2-x}Sr_xCuO_4$
–thin films 293
$Ln_{1-x}Pr_xBa_2Cu_3O_7$
–substitution effects 76

$SmBa_2Cu_3O_7$
–structure 415

$Y_{1-x}Pr_xBa_2Cu_3O_y$
–far-infrared spectra 59
$YBa_2(Cu_{1-x}Li_x)_3O_{6+\delta}$
–structure 307
$YBa_2Cu_3O_{6+x}$
–structure 223
$YBa_2Cu_3O_{6.51}$
–structure 1
$YBa_2Cu_3O_{7-\delta}$
–structure 81
–synthesis 9
–thin films 9, 430
$YBa_2Cu_3O_{7-x}$
–synthesis 55
–thin films 55
$YBa_2Cu_3O_x$
–electrical resistivity 373
–structure 373
$YBa_2Cu_3O_x$–BaF_2
–stratified structure 145
$YBa_2Cu_4O_8$
–band structure 277
–NMR 277
Y–Ba–Cu–O
–synthesis 177
Y–Sr–Cu–O
–structure 205
–synthesis 205